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## GOVERNMENT REFORM AND SAVINGS ACT OF 1993

NOVEMBER 15, 1993.—Ordered to be printed

Mr. Brown of California, from the Committee on Science, Space, and Technology, submitted the following

## REPORT

[To accompany H.R. 3400 which on October 28, 1993 was referred jointly to the following committees for a period ending not later than November 15, 1993: Agriculture, Armed Services, Banking, Finance and Urban Affairs, Education and Labor, Energy and Commerce, Foreign Affairs, Government Operations, House Administration, the Judiciary, Merchant Marine and Fisheries, Natural Resources, Permanent Select Committee on Intelligence, Post Office and Civil Service, Public Works and Transportation, Science, Space, and Technology, Veterans' Affairs, and Ways and Means]

The Committee on Science, Space, and Technology, to whom was referred the bill (H.R. 3400) to provide a more effective, efficient, and responsive government, having considered the same, report favorably thereon with amendments and recommend that the bill as amended do pass.

The amendments (stated in terms of the page and line numbers

of the introduced bill) are as follows:

Page 12, line 7, after "national needs." insert the following: "It is the sense of Congress that such a proposed system, contingent on the provision of adequate resources to fully meet the national security interests of the United States, shall be operated as a civil

system by the Department of Commerce.".
Page 12, line 15, insert "The National Aeronautics and Space Administration and the National Oceanic and Atmospheric Administration shall jointly develop a plan to implement a program modelled after the Operational Satellite Improvement Program for the purpose of making incremental enhancements in operational weather satellite systems. The goal of the plan shall be to achieve these enhancements in a cost effective manner by implementing procedures aimed at avoiding duplication of effort, cost overruns, and schedule delays. The Administrators of the National Aeronautics and Space Administration and the National Oceanic and

Atmospheric Administration shall submit to Congress no later than April 30, 1994, a report detailing the elements of the plan and outlining savings in budget authority and budget outlays projected through fiscal year 1999." after "1994 and 1999.".

#### I. PURPOSE OF THE BILL

The purpose of the bill is to provide for a more effective, efficient, and responsive government.

#### II. COMMITTEE ACTIONS

On November 9, 1993, the Subcommittee on Space held a hearing on the issue of "Convergence," which is mandated by Title II of H.R. 3400. Witnesses at the hearing included Dr. D. James Baker, Under Secretary for Oceans and Atmosphere, National Oceanic and Atmospheric Administration, U.S. Department of Commerce; Dr. George Schneiter, Director of Strategic and Space Systems, Office of the Under Secretary of Defense for Acquisition, U.S. Department of Defense; and Mr. William Townsend, Deputy Assistant Administrator for Mission to Planet Earth, National Aeronautics and Space Administration.

On November 10, 1993, the Committee on Science, Space, and Technology approved Title II of H.R. 3400, as amended, and ordered the bill reported to the full House of Representatives.

#### III. BACKGROUND AND NEED FOR THE LEGISLATION

At present, the United States maintains two polar-orbiting meteorological satellite systems: (1) the National Oceanic and Atmospheric Administration (NOAA) Polar-orbiting Operational Environmental Satellites (POES), for civil forecasting and research purposes; and (2) the Department of Defense's Defense Meteorological Satellite Program (DMSP) for national-security purposes. Both agencies operate and maintain a constellation of two polar-orbiting satellites. The NOAA system is deployed to provide both AM and PM coverage (with one satellite passing over the equator in the morning and one passing over the equator in the afternoon).

In addition to these "METSAT" programs, NASA has initiated Mission to Planet Earth, which is NASA's part of the U.S. Global Change Research Program. The centerpiece of this effort is the Earth Observing System (EOS), a series of six different satellites to measure various parameters critical to understanding climate change. The second of these satellites, currently scheduled for launch in 2000, is called EOS-PM (PM indicating that the satellite crosses over the equator in the afternoon). The instruments on EOS-PM are much more capable and better calibrated versions of the instruments currently flying on the NOAA weather satellites (POES).

Currently, the NOAA POES program, the DOD DMSP program, and the NASA EOS-PM program all are in various stages of developing new spacecraft and instruments. Over the next 10 years, the estimated total cost for these three efforts exceeds \$6 billion in development, production, and operations costs. However, many policy makers believe that the nation cannot afford to develop three separate satellite systems with such similar missions.

The United States through NOAA and the National Weather Service is committed to an operational environmental polar satellite program because of the critical value of the data the satellites collect. Polar satellites collect temperature and moisture measurements (key inputs to computer weather prediction models generating all national three- to five-day weather forecasts); measurements of the Antarctic ozone levels, longterm environmental measurements used to support global climate change studies; sea surface temperature measurements; and global cloud-cover images. Polar satellites also provide other valuable support missions, such as monitoring emergency distress beacons to aid search and rescue missions and worldwide data collection to support a variety of activities.

Over the past 20 years, a number of studies have reviewed the possibility of converging the POES and DMSP programs. The programs now have similar spacecraft, use a common launch vehicle, share products derived from the data, provide complementary environmental data to the nation, and work closely together on research and development efforts. In all, the programs have achieved substantial commonality, but national security concerns have pre-

cluded full convergence.

A single operational polar weather satellite program could meet the needs of both users through DOD and NOAA cooperation, and also allow both agencies to meet critical operational requirements (such as collecting oceanographic and global tropospheric wind data) which neither agency has been able to afford alone. The converged operational program might be able to save additional costs by using the NASA EOS program's state-of-the-art spacecraft and instruments instead of forcing NOAA to design and build its own. The result would be a single development program (compared to the three planned today) and minimal overlap between NASA's climate research and the NOAA/DOD converged operational meteoro-

logical missions.

NASA's EOS-PM climate research satellite is being designed with the idea that some of its instruments could be used in the future by NOAA to improve the capabilities of the POES program. This continues a historical NOAA/NASA relationship wherein NASA develops new technology and demonstrates prototype hardware, and NOAA buys identical units for continued operational service. However, current plans involve flying three EOS-PM satellites over 15 years, during which time POES will also have operational satellites. Over most of this period, both programs could be flying instruments with similar purposes, though with dramatically different capabilities. It may be possible to save money by having NASA fly the prototype instruments once and then transfer them to NOAA's operational program for future flights. On the other hand, NASA's instruments appear to be so much more capable and expensive than NOAA's that NOAA may neither need nor be able to afford them. It is also possible that requiring NOAA to fly these NASA instruments on POES could require a complete redesign of the POES satellites, leading to cost increases rather than cost savings.

Further cost reduction could be achieved through greater international participation. Greater international coordination and col-

laboration on sensors and systems will eventually be needed in order to reap the greatest benefit from the world-wide investment in remote sensing. NOAA is already working on such arrangements in its POES program through negotiations with the European Organization for the Exploitation of Meteorological Satellites (EUMETSAT) whereby EUMETSAT will build or purchase, launch, and operate one of the two current POES missions (the AM mission) beginning in the year 2000. This will save the U.S. more than \$100 million for each launch of one of these satellites. Such cooperation with the Europeans is an important component of costefficient operations and is the first step to a truly international environmental satellite observing system.

### IV. SECTION-BY-SECTION ANALYSIS

Section 2001 directs the Departments of Defense and Commerce and the National Aeronautics and Space Administration to propose a single operational polar environmental and weather satellite program to meet national needs. It is the sense of Congress that such a proposed system, contingent upon the provision of adequate resources to fully meet the national security interests of the United States, shall be operated as a civil system by the Department of Commerce.

Section 2001 requires the Director of the Office of Science and Technology Policy to submit a detailed implementation plan to Congress by April 30, 1994, designed to result in savings of up to \$300 million in budget authority and up to \$241 million in outlays

between fiscal years 1994 and 1999.

Section 2001 also directs the National Aeronautics and Space Administration and the National Oceanic and Atmospheric Administration to develop a plan to implement a program modelled after the Operational Satellite Improvement Program for the purposes of making incremental enhancements in operational weather satellites. The goal of the plan shall be to achieve these enhancements in a cost effective manner by implementing procedures aimed at avoiding duplication of effort, cost overruns, and schedule delays. The Administrators of NASA and NOAA are directed to submit an implementation plan to Congress by April 30, 1994, detailing the elements of the plan and outlining savings in budget authority and outlays through fiscal year 1999.

#### V. OVERSIGHT FINDINGS AND RECOMMENDATIONS

Pursuant to rule XI, clause 2(1)(3), of the Rules of the House of Representatives, and under the authority of rule X, clause 2(b)(1), and clause 3(f), the results and findings of oversight activities considered by the Committee on Science, Space, and Technology have been adopted and are incorporated in the recommendations found in the present bill and report.

### VI. CONGRESSIONAL BUDGET ACT INFORMATION

This bill does not provide new budget authority and consequently the provision for section 308(a) of the Congressional Budget Act of 1974 is not applicable.

# VII. COMMITTEE COST ESTIMATE ON BILLS OR JOINT RESOLUTIONS OF PUBLIC CHARACTER

In accordance with the requirements of section 252(b) of the Legislative Organization Act of 1970 and pursuant to rule XIII, clause 7 of the Rules of the House of Representatives, the committee estimates the cost savings accruing to the Federal Government during the current and five subsequent years as a result of the enactment of Title II of this legislation as follows:

[By fiscal year, in millions of dollars]

		Budget au- thority	Outlays
1994		0	0
1995 1996		0	0
		- \$75	- \$50
1997		- 75	- 75
1998		75	- 75
1999		<del>- 75</del>	- 75
	Total 1	-300	- 270

1 Based upon a three satellite system with European participation and relying on NASA to develop new hardware.

# VIII. OVERSIGHT FINDINGS AND RECOMMENDATIONS, COMMITTEE ON GOVERNMENT OPERATIONS

No findings or recommendations on oversight activity pursuant to rule X, clause 2(b)(2), and rule XI, clause 2(l)(3)(D), of the Rules of the House of Representatives have been submitted by the Committee on Government Operations for inclusion in this report.

#### IX. EFFECT OF LEGISLATION ON INFLATION

In accordance with rule XI, clause 2(1)(4) of the Rules of the House of Representatives, this legislation is assessed to have no inflationary effect on prices and costs in the operation of the national economy.

X. CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED If enacted, this bill would make no changes to existing law.



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